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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,287	08/27/2003	Jack Saltiel	32001.UT	5496

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Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A.
Suite 1401
255 South Orange Avenue
P.O. Box 3791
Orlando, FL 32802-3791

EXAMINER
WONG, EDNA

ART UNIT	PAPER NUMBER
1753	

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/649,287	SALTIEL, JACK	
	Examiner	Art Unit	
	Edna Wong	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15 and 18-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15 and 18-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This is in response to the Amendment dated March 10, 2006. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Election/Restrictions

Applicant's election without traverse of Group I, claims **1-15 and 18-29**, in the reply filed on March 19, 2006 is acknowledged.

Claim Objections

Claims **6, 17 and 18** have been objected to because of the minor informalities.

The objection of claims 6, 17 and 18 has been withdrawn in view of Applicant's amendment.

Claim Rejections - 35 USC § 112

I. Claims **1-29** have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The rejection of claims 1-29 under 35 U.S.C. 112, first paragraph, has been

withdrawn in view of Applicant's amendment.

II. Claims **7 and 17** have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 7 and 17 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicant's amendment.

Claim Rejections - 35 USC § 102

I. Claims **6-9** have been rejected under 35 U.S.C. 102(b) as being anticipated by **Malatesta et al.** (US Patent No. 4,388,242).

The rejection of claims 6-9 under 35 U.S.C. 102(b) as being anticipated by Malatesta et al. has been withdrawn in view of Applicant's amendment.

II. Claims **11, 13 and 14** have been rejected under 35 U.S.C. 102(b) as being anticipated by **Malatesta et al.** (US Patent No. 4,388,242).

The rejection of claims 11, 13 and 14 under 35 U.S.C. 102(b) as being anticipated by Malatesta et al. has been withdrawn in view of Applicant's amendment.

III. Claims **24-28** have been rejected under 35 U.S.C. 102(b) as being anticipated by **Stevens** (US Patent No. 4,686,023).

The rejection of claims 24-28 under 35 U.S.C. 102(b) as being anticipated by Stevens has been withdrawn in view of Applicant's amendment.

IV. Claims **24-28** have been rejected under 35 U.S.C. 102(b) as being anticipated by **Malatesta et al.** (US Patent No. 4,388,242).

The rejection of claims 24-28 under 35 U.S.C. 102(b) as being anticipated by Malatesta et al. has been withdrawn in view of Applicant's amendment.

Claim Rejections - 35 USC § 103

Stevens

I. Claims **11-14 and 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** (US Patent No. 4,686,023).

With regards to claims 16 and 17, the rejection under 35 U.S.C. 103(a) as being unpatentable over Stevens has been withdrawn in view of Applicant's amendment. Claims 16 and 17 have been cancelled.

With regards to claims 11-14, the rejection under 35 U.S.C. 103(a) as being unpatentable over Stevens is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the following reasons:

Applicant states that the Stevens reference fails to teach wherein the reaction mixture contains essentially no photosensitizer.

In response, Claim 11, lines 2-3, recite "substantially no photosensitizer".

The word "*substantially*" is defined as being largely but not wholly that which is specified. Thus, the 0.001 g/l up to a saturated solution of anthracene in the chosen solvent of anthracene disclosed by Stevens (col. 4, lines 50-65) is largely but not wholly that which is specified, and thus, would have been a reaction mixture substantially free of photosensitizer.

II. Claim **15** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** (US Patent No. 4,686,023) as applied to claims 11-14 and 16-17 above, and further in view of **Michishita et al.** (US Patent No. 6,902,654 B2).

The rejection of claim 15 under 35 U.S.C. 103(a) as being unpatentable over Stevens as applied to claims 11-14 and 16-17 above, and further in view of Michishita et al. is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

III. Claims **18-22** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** (US Patent No. 4,686,023).

The rejection of claims 18-22 under 35 U.S.C. 103(a) as being unpatentable over Stevens is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the following reasons:

Claim 18, lines 5-6, recite "a second irradiation of the reaction mixture substantially free of photosensitizer".

The word "*substantially*" is defined as being largely but not wholly that which is specified. Thus, the 0.001 g/l up to a saturated solution of anthracene in the chosen solvent of anthracene disclosed by Stevens (col. 4, lines 50-65) is largely but not wholly that which is specified, and thus, would have been a reaction mixture substantially free of photosensitizer.

IV. Claim **23** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** (US Patent No. 4,686,023) as applied to claims 18-22 above, and further in view of **Michishita et al.** (US Patent No. 6,902,654 B2).

The rejection of claim 23 under 35 U.S.C. 103(a) as being unpatentable over Stevens is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

V. Claim **29** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** (US Patent No. 4,686,023) as applied to claims 24-28 above, and further in view of **Michishita et al.** (US Patent No. 6,902,654 B2).

The rejection of claim 29 under 35 U.S.C. 103(a) as being unpatentable over

Stevens as applied to claims 24-28 above, and further in view of Michishita et al. has been withdrawn in view of Applicant's amendment.

Malatesta

VI. Claims **1-4** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242).

The rejection of claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the following reasons:

Applicants state that Applicant has pointed at least to present FIG. 8 for support and for showing that in the present system the compounds of interest demonstrate near zero, if not zero, absorption of light energy at these wavelengths. Malatesta fails to teach absorption at wavelengths below 330 nm in the second irradiation step and, therefore, cannot make the claimed invention obvious.

In response, Applicant's FIG. 8 shows the UV spectra of *HOVit* isomers in methanol at 20°C. *HOVit* isomers are not claimed in claim 1. Therefore, is Applicant saying that Lumi and Pre is the same as HOLumi and HOPre, respectively, and/or Lumi and Pre have zero absorption of light energy at approximately 313 nm?

Malatesta discloses a 17 nm difference (330 nm) from 313 nm as presently claimed in claim 1. Since Lumi and Pre does not appear to be the same as HOLumi and HOPre, Lumi and Pre would have absorbed light energy at approximately 313 nm.

VII. Claim **5** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 1-4 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

The rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 1-4 above, and further in view of Michishita et al. is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

VIII. Claim **10** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 6-9 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

The rejection of claim 10 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 6-9 above, and further in view of Michishita et al. has been withdrawn in view of Applicant's amendment.

IX. Claim **12** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 11, 13 and 14 above.

The rejection of claim 12 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 11, 13 and 14 above has been withdrawn in view of

Applicant's amendment.

X. Claim **15** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 11, 13 and 14 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

The rejection of claim 15 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 11, 13 and 14 above, and further in view of Michishita et al. has been withdrawn in view of Applicant's amendment.

XI. Claims **16 and 17** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 11, 13 and 14 above, and further in view of **Stevens** (US Patent No. 4,686,023).

The rejection of claims 16 and 17 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 11, 13 and 14 above, and further in view of Stevens has been withdrawn in view of Applicant's amendment. Claims 16 and 17 have been cancelled.

XII. Claims **18-22** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242).

The rejection of claims 18-22 under 35 U.S.C. 103(a) as being unpatentable over Stevens is as applied in the Office Action dated December 2, 2005 and incorporated

herein. The rejection has been maintained for the following reasons:

Applicants state that Applicant has pointed at least to present FIG. 8 for support and for showing that in the present system the compounds of interest demonstrate near zero, if not zero, absorption of light energy at these wavelengths. Malatesta fails to teach absorption at wavelengths below 330 nm in the second irradiation step and, therefore, cannot make the claimed invention obvious.

In response, Applicant's FIG. 8 shows the UV spectra of *HOVit* isomers in methanol at 20°C. *HOVit* isomers are not claimed in claim 1. Therefore, is Applicant saying that Lumi and Pre is the same as HOLumi and HOPre, respectively, and/or Lumi and Pre have zero absorption of light energy at approximately 313 nm?

Malatesta discloses a 17 nm difference (330 nm) from 313 nm as presently claimed in claim 1. Since Lumi and Pre does not appear to be the same as HOLumi and HOPre, Lumi and Pre would have absorbed light energy at approximately 313 nm.

XIII. Claim **23** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 18-22 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

The rejection of claim 23 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 18-22 above, and further in view of Michishita et al. is as applied in the Office Action dated December 2, 2005 and incorporated herein. The rejection has been maintained for the reasons as discussed above.

Applicants' remarks have been fully considered but they are not deemed to be persuasive.

XIV. Claim **29** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 24-28 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

The rejection of claim 29 under 35 U.S.C. 103(a) as being unpatentable over Malatesta et al. as applied to claims 24-28 above, and further in view of Michishita et al. has been withdrawn in view of Applicant's amendment.

Response to Amendment

Declaration

The declaration under 37 CFR 1.132 filed March 10, 2006 is sufficient to overcome the rejection of claims 1-29 based upon 35 U.S.C. 112, first paragraph.

Claim Objections

Claims **21-23 and 27-29** are objected to because of the following informalities:

Claim 21

line 1, the word "comprises" should be amended to the word -- contains --. See claim 18, line 2.

Claim 22

line 1, the word "comprises" should be amended to the word -- contains --. See claim 18, line 2.

Claim 23

line 1, the word "comprises" should be amended to the word -- contains --. See claim 18, line 2.

Claim 27

line 1, the word "comprises" should be amended to the word -- contains --. See claim 24, line 3.

Claim 28

line 1, the word "comprises" should be amended to the word -- contains --. See claim 24, line 3.

Claim 29

line 1, the word "comprises" should be amended to the word -- contains --. See claim 24, line 3.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

I. Claims **6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242).

Malatesta teaches a process for producing previtamin D (= previtamin D_2 or previtamin D_3), the process comprising:

a first irradiation of a reaction mixture containing provitamin D (= 7-dehydrocholesterol (7-DHC) or ergosterol) in the absence of a photosensitizer with light having a wavelength of approximately 240 to 265 nm (= 245-260 nm) [col. 1, lines 50-57]; and

a second irradiation of said reaction mixture with light having a wavelength of approximately from 330-360 nm and in the absence of a photosensitizer (col. 1, lines 58-65).

The first and second irradiations are sequential (col. 1, line 50 to col. 2, line 1; and Fig. 1).

The reaction mixture further contains a solvent (= diethyl ether) [col. 2, lines 7-11].

The reaction mixture further contains an organic solvent (= diethyl ether) [col. 2, lines 7-11].

The process of Malatesta differs from the instant invention because Malatesta does not disclose wherein the wavelength is approximately from 300 to less than 330

nm, as recited in claim 6.

Malatesta teaches 330 nm (col. 1, lines 58-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by Malatesta with wherein the wavelength is approximately from 300 to less than 330 nm because a wavelength of 329 nm is only a 1 nm difference from 330 nm. A 1 nm difference is not deemed a patentable modification; however, such changes may impart patentability to a process if the ranges claimed produce new and unexpected results which are different in kind and not merely in degree from results of the prior art, such ranges are termed "critical" ranges and Applicant has the burden of proving such criticality; even though Applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within capabilities of one skilled in the art; more particularly, where general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation. *In re Aller*, 220 F2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and MPEP § 2144.05.

II. Claim **10** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 6-9 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

Malatesta is as applied above and incorporated herein.

The process of Malatesta differs from the instant invention because Malatesta

does not disclose wherein the reaction mixture further contains methanol.

Like Malatesta, Michishita teaches process for the production of previtamin D (col. 14, lines 9-16). Michishita teaches that the reaction solvent includes ether solvents such as diethyl ether; alcohol solvents such as methanol; hydrocarbon solvents and halogenated hydrocarbon solvents (col. 14, lines 17-24).

Malatesta teaches diethyl ether (col. 2, lines 7-11).

The invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the solvent described by Malatestra with wherein the reaction mixture further contains methanol because diethyl ether and methanol are functionally equivalent as reaction solvents in such processes as taught by Michishita (col. 14, lines 9-24).

III. Claims **11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242).

Malatesta teaches a process for producing previtamin D (= previtamin D_2 or previtamin D_3), the process comprising:

irradiating a reaction mixture containing tachysterol (= tachysterol$_2$ (approx. 75%)) [col. 1, lines 55-57] and substantially no photosensitizer with light having a wavelength of approximately from = 330-360 nm (col. 1, lines 58-65).

The reaction mixture further contains a solvent (= diethyl ether) [col. 2, lines 7-11].

The reaction mixture further contains an organic solvent (= diethyl ether) [col. 2, lines 7-11].

The process of Malatesta differs from the instant invention because Malatesta does not disclose the following:

a. Wherein the wavelength is approximately from 300 to less than 330 nm, as recited in claim 11.

b. Wherein said wavelength consists of 313 nm, as recited in claim 12.

Malatesta teaches 330 nm (col. 1, lines 58-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by Malatesta with wherein the wavelength is approximately from 300 to less than 330 nm; and wherein said wavelength consists of 313 nm because a wavelength of 329 nm is only a 1 nm difference from 330 nm. A 1 nm and 17 nm difference are not deemed patentable modifications; however, such changes may impart patentability to a process if the ranges claimed produce new and unexpected results which are different in kind and not merely in degree from results of the prior art, such ranges are termed “critical” ranges and Applicant has the burden of proving such criticality; even though Applicant’s modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within capabilities of one skilled in the art; more particularly, where general conditions of the claim are disclosed in the prior art, it is not

inventive to discover optimum or workable ranges by routine experimentation. *In re Aller*, 220 F2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and MPEP § 2144.05.

IV. Claim **15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 11-14 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

Malatesta is as applied above and incorporated herein.

The process of Malatesta differs from the instant invention because Malatesta does not disclose wherein the reaction mixture further contains methanol.

Like Malatesta, Michishita teaches process for the production of previtamin D (col. 14, lines 9-16). Michishita teaches that the reaction solvent includes ether solvents such as diethyl ether; alcohol solvents such as methanol; hydrocarbon solvents and halogenated hydrocarbon solvents (col. 14, lines 17-24).

Malatesta teaches diethyl ether (col. 2, lines 7-11).

The invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the solvent described by Malatestra with wherein the reaction mixture further contains methanol because diethyl ether and methanol are functionally equivalent as reaction solvents in such processes as taught by Michishita (col. 14, lines 9-24).

V. Claims **24-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Malatesta et al. (US Patent No. 4,388,242).

Malatesta teaches a process for the production of vitamin D (col. 2, lines 1-3) by light irradiation without the use of a photosensitizer, the process comprising:

(a) a first irradiation of a reaction mixture containing provitamin D (= 7-dehydrocholesterol (7-DHC) or ergosterol) without a photosensitizer with light having a wavelength of approximately 250 to 265 nm (= 245-260 nm) [col. 1, lines 50-57]; and

(b) a second irradiation of said reaction mixture without photosensitizer with light having a wavelength in the range of 330 to 360 nm (col. 1, lines 58-65).

(c) heating (= thermolysis) the reaction mixture after the second irradiation (col. 2, lines 1-3).

The heating consists of a temperature not exceeding 100°C (= about 60°C) [col. 2, lines 23-26].

The first and second irradiations are sequential (col. 1, line 50 to col. 2, line 1; and Fig. 1).

The reaction mixture further contains a solvent (= diethyl ether) [col. 2, lines 7-11].

The reaction mixture further contains an organic solvent (= diethyl ether) [col. 2, lines 7-11].

The process of Malatesta differs from the instant invention because Malatesta does not disclose wherein the wavelength is approximately from 300 to less than 330

nm, as recited in claim 24.

Malatesta teaches 330 nm (col. 1, lines 58-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by Malatesta with wherein the wavelength is approximately from 300 to less than 330 nm because a wavelength of 329 nm is only a 1 nm difference from 330 nm. A 1 nm difference is not deemed a patentable modification; however, such changes may impart patentability to a process if the ranges claimed produce new and unexpected results which are different in kind and not merely in degree from results of the prior art, such ranges are termed "critical" ranges and Applicant has the burden of proving such criticality; even though Applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within capabilities of one skilled in the art; more particularly, where general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation. *In re Aller*, 220 F2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and MPEP § 2144.05.

VI. Claim **29** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Malatesta et al.** (US Patent No. 4,388,242) as applied to claims 24-28 above, and further in view of **Michishita et al.** (US Patent no. 6,902,654 B2).

Malatesta is as applied above and incorporated herein.

The process of Malatesta differs from the instant invention because Malatesta

does not disclose wherein the reaction mixture further contains methanol.

Like Malatesta, Michishita teaches process for the production of previtamin D (col. 14, lines 9-16). Michishita teaches that the reaction solvent includes ether solvents such as diethyl ether; alcohol solvents such as methanol; hydrocarbon solvents and halogenated hydrocarbon solvents (col. 14, lines 17-24).

Malatesta teaches diethyl ether (col. 2, lines 7-11).

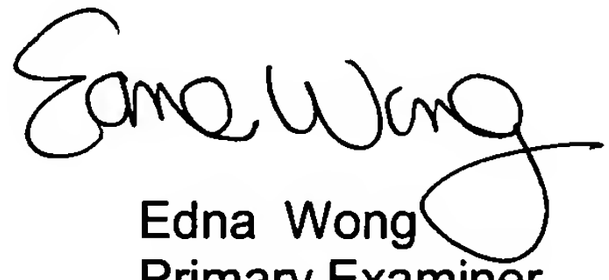
The invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the solvent described by Malatestra with wherein the reaction mixture further contains methanol because diethyl ether and methanol are functionally equivalent as reaction solvents in such processes as taught by Michishita (col. 14, lines 9-24).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edna Wong
Primary Examiner
Art Unit 1753

EW
April 30, 2006